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10/541,649	04/18/2006	Keith Randal Anderson	0074-524977	3414

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EXAMINER	
KLAYMAN, AMIR ARIE	
ART UNIT	PAPER NUMBER
3711	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,649	ANDERSON ET AL.	
	Examiner	Art Unit	
	AMIR KLAYMAN	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *36,37,39-42,44,46-53 and 55-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36,37,39-42,44,46-53 and 55-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham*. Exemplary rationales that may support a conclusion of obviousness include:

(A) Combining prior art elements according to known methods to yield predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) " Obvious to try " – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

2. Claims 36-37, 39, 42, 44, 46-53 and 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Asch WO 00/01455 in view of Feuz US 5121695.

Van Asch teaches an amusement ride assembly in figs 1-7 (assembly related to Bungy jumping). The system includes a rotatable endless loop cable (drive cable **15**), position between bull wheel **16** and guide bull wheel **17**(i.e. end stations) in figs 1 and 4. Upon cable **15**, there is a passenger carrier (gondola **18** as seen in fig 3 and mobile platforms **23** and **24** in figs 4-5; see page 5 lines 6-10 where the mobile platforms are the same as the gondola) having roller wheels **19** rotatably engaged with the cable as best seen in fig 3. Van Asch is silent regarding a clamping mechanism and an electronic control system.

In the field of amusement ride assembly, Feuz teaches a ride assembly overhead cableway known to be used in ski resorts/parks, having rotatable endless loop cable **2** between stations, passenger carrier (seat **50**, see figs 1-3), and clamping mechanism (construed as clamp **52**, having jaws **54**, **56** which are connected by bolt **58** with a support shaft **62** as seen in fig 3 and discussed in column 4 lines 20-50).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide Van Asch's amusement ride with a clamp mechanism as taught by Feuz for the reason that a skilled artisan would have been motivated by Van Asch's

explicit teaching that the passenger carrier being clamped to the cable **15** and moved with the cable as discussed in page 5 lines 11-12.

With respect to the electronic control system, Feuz teaches in column 1, lines 1-47 and in column 3, lines 8-42 that the movement of cable **2** is a movement in a certain rpm movement (it is understood that this movement of the cable is caused by the drive system which is operated automatically, i.e. via the electronic control system).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide Van Asch with an electronic control system as taught by Feuz for the reason that a skilled artisan would have been motivated to use a known technique (Feuz's electronic control system within a ski-lift) to improve similar devices (Van Asch's amusement ride) to obtain the predictable results of using a well known component (i.e. an electronic control system) to monitor and control the movement of a passenger carrier upon a rotatable cable.

Furthermore, examiner notes where the only difference between a prior art product and a claimed product is the use of modern electronics, the Federal Circuit found that "[a]ccomodating a prior art mechanical device that accomplishes that goal to modern electronics would have been reasonably obvious to one of ordinary skill in the art. Applying modern electronics to older mechanical devices has been commonplace in recent years" Leapfrog Enterprises, Inc. v. Fisher-Price, Inc., 485 F.3d1157, 82 USPQ2d 1687 (Fed. Cir. 2007). Adding an electronic control system to Van Asch's device would have not change the nature of his device as being an amusement ride

assembly. Thus, the use of a well known electronic control system does not provide any new or unobvious matter.

As per claim 36, Van Asch teaches an amusement ride assembly in figs 1-7 (assembly related to Bungy jumping), comprising:

a rotatable endless loop cable (drive cable **15**), position between bull wheel **16** and guide bull wheel **17** (i.e. end stations) in figs 1 and 4;

a passenger carrier (gondola **18** as seen in fig 3 and mobile platforms **23** and **24** in figs 4-5; see page 5 lines 6-10 where the mobile platforms are the same as the gondola) having roller wheels **19** rotatably engaged with the cable as best seen in fig 3.

With respect to the drive system, it is inherent in Van Asch to have a drive system operable to rotate the loop cable via bull wheels **16** and **17**.

Van Asch is silent regarding a clamping mechanism and an electronic control system. However, Feuz teaches a ride assembly overhead cableway known to be used in ski resorts/parks, having rotatable endless loop cable **2** between stations, passenger carrier (seat **50**, see figs 1-3), and clamping mechanism (construed as clamp **52**, having jaws **54**, **56** which are connected by bolt **58** with a support shaft **62** as seen in fig 3 and discussed in column 4 lines 20-50). Also, Feuz teaches in column 1, lines 1-47 and in column 3, lines 8-42 that the movement of cable **2** is a movement in a certain rpm movement (it is understood that this movement of the cable is caused by the drive system which is operated automatically, i.e. via the electronic control system).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide Van Asch's amusement ride with a clamp mechanism and an electronic control system as taught by Feuz for the reasons discussed above.

With respect to the method of using the apparatus (i.e. enabling the passenger carrier to free-roll along the cable or actuating the clamp mechanism via the electronic system) examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429,1431-32 (Fed. Cir. 1997). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch &Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

The modified Van Asch structure is fully capable of performing the same function as claimed, since his device is equipped with the same features as the claim subject matter. The modified Van Asch would have had a clamp mechanism and an electronic control system (as taught by Feuz) and while wheels **19** are unclamped, the passenger carrier (gondola **18** or platforms **23** and **24**) would have free roll along cable **15** due to the gravitational forces.

As per claims 37, 39, 44, 58, regarding the function of the control system to control over the carrier movement as well as the clamping mechanism, see examiner discussion above that the examination was conducted on the fact that the structure limitation is the claimed subject matter for an apparatus claim.

As per claim 42, it is understood that the drive system (which include bull wheels **16** and **17**) are not limited to one direction; thus bull drive wheel **16** can rotate left or right and accordingly bull guide wheel **17** will follow. Thus, the drive system is operable to drive cable **15** in either direction. Furthermore, in the same reference but in different embodiment Van Asch teaches an amusement ride assembly having cable **45** and drive wheels **41** and **42** causing the cable to drive in either direct **A** or **B** as shown in fig 7 and discussed in page 6 line 26 to page 7 line 2.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the modified Van Asch's ride assembly (regarding his first embodiment as seen in figs 1-5) with a drive system that rotates the cable in both direction as taught by Van Asch (second embodiment as shown in fig 7) for the reason that a skilled artisan would have been motivated in providing a simple substitution for one known element for another to obtain the predictable results of a rotatable endless cable supporting a passenger carrier thereon to rotate and move the carrier from one station to the other station.

With respect to the function of the control system, see examiner discussion above that the examination was conducted on the fact that the structure limitation is the claimed subject matter for an apparatus claim.

As per claim 46, Van Asch discloses two passenger carriers (mobile jumping platforms **23** and **24**) in fig 4.

As per claim 47, Feuz teaches an assembly ride in column 1, lines 5-45 to be used in a ski resort/park, wherein it would have been obvious in this type of assemblies to have intermediate stations (i.e. posts) to support the overhead cable where the distance between the start and destination of the cableway is very long in order to prevent the cable from drooping and maintain the height of the cable from the ground . The modified Van Asch would have had a post (i.e. intermediate stations) to support the cable.

As per claims 48-51 regarding the method of using the clamp and control system of the amusement ride, see page 4 line 27 to page 5 line 5 regarding the loading of passengers to gondola **18** (as the same as onto platforms **23** and **24**). As discussed above the modified Van Asch would have had a clamp mechanism and an electronic control system (as taught by Feuz) and while wheels **19** are unclamped, the passenger carrier (gondola **18** or platforms **23** and **24**) would have free roll along cable **15** due to gravitational forces. The carrier is traveling in the same direction as the rotating loop (i.e. in the same direction of the free-roll while wheels **19** are unclamped).

With respect to the timing of clamping the carrier (using the electronic control system) to the cable (below the cable speed or as the same speed, as recited in claims 49 and 51), it would have been obvious to clamp the carrier to the cable while the carrier at these particular speeds as a design choice or user preference's as a matter of safety issues concerning the passengers.

As per claims 52, 56, 57 all the claims limitations are unpatentable by Van Asch in view of Feuz as discussed in claim 1 above. With respect to forming the ride as two or more identical stages as recited in claim 52, it has been held by the court that mere duplication of parts has no patentable significance unless a new and unexpected result is produced, see In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Forming the ride assembly in several stages to spread upon a longer distance does not provide any new or unobvious matter.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the modified Van Asch's with two or more identical stages for the reason that a skilled artisan would have been motivated to extended the ride assembly upon a longer distance for a longer ride experience and providing more operation modes.

As per claim 53, regarding the method of using the apparatus and allowing the passengers to transfer between the stages, see examiner discussion above that the examination was conducted on the fact that the structure limitation is the claimed subject matter for an apparatus claim.

As per claim 55, Van Asch's wheel **16** (i.e. one station as discussed in claim 1 above) situated upon hill 4 (which construed as part of an adjacent stage) in fig 1.

Thus, station **16** formed a part of adjacent stage, while Van Asch's ride assembly would have two or more stages.

3. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Asch WO00/01455 and Feuz US 5121695 as applied to the claim 36 above, and further in view of Pearson US 4003314.

As per claim 40, the modified Van Asch does not disclose that the control system includes a sensor. In the field of ski lift (i.e. amusement ride assembly) Pearson discloses a sensor **45** in fig 1A. Pearson's sensor **45** is a proximity type sensor capable of detecting the proximity of a passenger carrier (chair **29**) to unloading zone **40** (equivalent to applicant's end station) in order to stop the conveyer if necessary in column 4, lines 56-64. Thus, Pearson teaches a proximity type sensor capable of detecting the proximity of a passenger carrier to an end station.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the modified Van Asch's amusement ride assembly with a proximity sensor type device as taught by Pearson to obtain the predictable results of monitoring the amusement ride assembly using computerize/electronic system which includes a well known feature such as a proximity type sensor. Adding a well known proximity type sensor to an electronic control system does not provide any new or unobvious matter.

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Asch WO00/01455 in view of Feuz US 5121695 as applied to the claims above, and further in view of Nagel US 5759107.

As per claim 41, the modified Van Asch is silent regarding a swivel mechanism. In the field of amusement devices, Nagel teaches an amusement device (gyroscopic amusement apparatus **2**) having an outer ring **4** for 360º rotational movement about horizontal axis and inner ring **6** for 360º for vertical axis by drive means as discussed in column 2 lines 29-36 (see figs 1-7 regarding these drive means, i.e. swivel mechanism).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the modified Van Asch's amusement ride device with a swivel mechanism to rotate the passenger carrier around a vertical axis as taught by Nagel for the reason that a skilled artisan would have been motivated in applying a known technique (a 360 º rotation movement as taught by Nagel) to a known device (the modified Van Asch's amusement ride device) ready for improvement to obtain the predictable results of user's preference (to add a swivel mechanism to the passenger carrier) for entertainment purposes.

5. Claims 59-61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Asch WO 00/01455 and Feuz US 5121695 as applied to the claims above, and further in view of Booker US 3854554.

As per claims 59 -61, the modified Van Asch does not disclose an electronic control system, being in each station (i.e. a control module) and communicates via a radio link. Also the modified Van Asch is silent regarding the control module located in the passenger carrier. Booker teaches a rotatble movement of carriers (elevator cars) controlled by control module at each station and within the passenger carrier in fig 9 and discussed in column 17 line 5 to column 18 line 22. Booker's system includes three control systems (first system located inside the cars, indicia **454**-**460**; second system car controller, indicia **462**-**468**; and third system processor **452**). Thus, Booker teaches the concept of several control modules including a control module located within the passenger carrier.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the modified Van Asch with a control module at each station (and/or within the carrier) as taught by Booker for the reason that a skilled artisan would have been motivated to control the traveling of the carrier upon the endless loop. Providing the well known aspect of control module units in each station or/and within the carrier, does not provide any new or unobvious matter. With respect to the communication between the module control done by radio link as recites in claim 49 (see Booker discussion in column 1 line 25 to column 2 line 37 regarding the communication of the control systems with each other via signals (construed as radio link)).

The modified Van Asch would have had several control units (as taught by Booker) located in each station (**16** and **17**) and/or within gondola **18** (or platforms **24** and **23**).

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMIR KLAYMAN whose telephone number is (571)270-7131. The examiner can normally be reached on Mo. - Fr. (7:30AM-5:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene KIM can be reached on (571) 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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/AK/ 6/4/10

/Gene Kim/

Supervisory Patent Examiner, Art Unit 3711